

Our Ref: ATP170617-AA-01\_Precinct 1.4 and 1.3  
Enquiries to: Sasho Temelkoski

4 November 2020

MIRVAC Masterplanned Communities  
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**Attention: Desmond Leong**

**Via e-mail: [desmond.leong@mirvac.com](mailto:desmond.leong@mirvac.com)**

Dear Sir,

**Re: Everleigh Estate, Precinct 1.4 (Lots 1004-1024) and Precinct 1.3 (Lot 1037)  
Advice on the Acoustic Design Requirements for Low-set and High-Set Houses**

The master planned Everleigh Estate has been subject of detailed acoustic assessment at development approval stage and there are a number of traffic noise mitigation measures implemented in the design and construction of this estate to ensure high quality noise amenity for the residents.

The upper floors (First Floors) of future high-set dwellings at the allotments adjacent to Teviot Road and Everleigh Drive are affected by traffic noise and thus require upgrade to the building façade to ensure protection of the internal noise amenity.

This letter summarises the traffic noise levels and corresponding QDC MP4.4 Noise Categories applicable to the future dwellings at the following allotments:

- Lots 1004-1024 (Precinct 1.4); and
- Lot 1037 (Precinct 1.3).

The traffic noise levels on the most exposed façade of the First Floor of future high-set dwellings and the corresponding QDC MP4.4 Noise Categories are summarised in Table 1.1.

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**Table 1.1 Traffic Noise Level and Corresponding QDC MP4.4 Noise Categories**

Precinct	Lot Number	Floor Level	Traffic Noise L <sub>10,18hr</sub> dB(A)	QDC MP4.4 Noise Category
P1.4	Lot 1004	First	68	Noise Category 3
	Lot 1005	First	68	Noise Category 3
	Lot 1006	First	68	Noise Category 3
	Lot 1007	First	68	Noise Category 3
	Lot 1008	First	68	Noise Category 3
	Lot 1009	First	68	Noise Category 3
	Lot 1010	First	68	Noise Category 3
	Lot 1011	First	68	Noise Category 3
	Lot 1012	First	68	Noise Category 3
	Lot 1013	First	68	Noise Category 3
	Lot 1014	First	68	Noise Category 3
	Lot 1015	First	67	Noise Category 2
	Lot 1016	First	67	Noise Category 2
	Lot 1017	First	67	Noise Category 2
	Lot 1018	First	67	Noise Category 2
	Lot 1019	First	67	Noise Category 2
	Lot 1020	First	67	Noise Category 2
	Lot 1021	First	67	Noise Category 2
	Lot 1022	First	67	Noise Category 2
	Lot 1023	First	67	Noise Category 2
	Lot 1024	First	67	Noise Category 2
P1.3	Lot 1037	First	64	Noise Category 2

Due to the noise barriers along Teviot Road and Everleigh Drive, the traffic noise levels at the Ground Floors are low. In accordance with the DA acoustic report prepared for Everleigh Estate, there are no acoustic requirements for the Ground Floors of Lots 1004-1024 and Lot 1037. Standard construction is acceptable for the Ground Floors.

Future high-set dwellings are impacted by traffic noise corresponding with QDC MP4.4 Noise Category 2 or 3 on the upper floor (First Floor). Therefore architectural treatment is required to the dwelling facades on the First Floor.

There are two options available for architectural treatment to the building façades, as follows:

- **Option 1:** Implementation of the 'acceptable forms of construction' specified in Queensland Development Code (QDC) Mandatory Part 4.4 (*Buildings in a Transport Noise Corridor*) for the relevant Noise Category; or
- **Option 2:** Floor plan specific acoustic design, in accordance with AS3671-1989, to ensure compliance with the internal noise criteria.

Please note that the acceptable forms of construction for Noise Categories 2 and 3 as specified in Schedule 2 of QDC MP4.4 are highly conservative with costly design requirements, particularly for the windows. For the upper floors of the future dwellings, cost-effective design solutions can be provided if floor plan specific acoustic design report is prepared as per AS3671-1989 (Option 2). The procedure for calculating the weighted sound reduction indices ( $R_w$ ) accounts for directivity, thus lesser design requirements are applicable to the facades which are not directly facing the road.

Should you have any questions about the QDC MP4.4 noise categories applicable to Lots 1004-1024 and Lot 1037, or require floor plan specific acoustic design report, please do not hesitate to contact our office on (07) 5593 0487.

Yours faithfully



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Managing Director and Principal Engineer